



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,067	07/16/2001	Gerhard Engel	10191/1825	9764
26646	7590	06/16/2005	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			UBILES, MARIE C	
			ART UNIT	PAPER NUMBER
			2642	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,067

Applicant(s)

ENGEL, GERHARD

Examiner

Marie C. Ubiles

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on February 22, 2005. Claims 9-16 have been amended. No claims have been cancelled. No claims have been added. Claims 9-16 are still pending in this application, with claims 9 and 16 being independent.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 9-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Archambaud et al. (US 6,115,367).

As for claim 9, Archambaud et al. discloses a radio receiver (See element 79, Fig. 6) including a processor (or *microcontroller* 72, Fig 6) for ascertaining a radio data (may be read on the use of PHS as described on Col. 1, 35-38) error rate (or *RSSI*) and for controlling least one switching operation dependent on the radio data error rate (See Col. 7, lines 11-15); a plurality of receiving antennas (See elements 16-18, Fig. 6); and an antenna switching system (See element 78, Fig. 6) for performing the at least one switching operation from one antenna of the plurality of receiving antennas to another antenna of the plurality of receiving antennas being connected to the processor (See Col. 7, lines 11-15), each of the plurality of receiving antennas being connectable to the radio receiver via the antenna switching system (See elements 16-18, 78-79, Fig. 6).

Regarding the "radio data system (RDS) radio receiver" and the "radio data system error rate", the Examiner believes that radio receiver of the PHS (See element

79, Fig. 6 and Col. 1, 35-38) reads on the radio data receiver and that the RSSI signal is used for data error rate comparison (as read on the bit by bit comparison of the RSSI signal received)(See, for example, Col. 2, lines 2-28).

Regarding the preamble limitation reciting a "broadcast" receiving system, the Examiner believes that the radio system of Archambaud fairly characterizes a broadcast sytem.

Claim 16 is rejected for the same reasons as claim 9.

As for claim 10, Archambaud et al. teaches the processor including a control device having a control line (may be read from "...*and configured to receive control signals therefrom*")(See Fig. 6 and Col. 7, lines 3-5).

As for claims 11-12 and 17-18, the limitations "wherein the control line includes a single control wire for transmitting different currents to the antenna switching system as switching commands" and "wherein the different currents include at least one of 0 mA, 2 mA, 4 mA and 6 mA"; may be read on the use of RSSI to determine the switching commands. RSSI is a measure of the received signal power and that power is proportional to measurements of voltage and current, thus it would have been obvious to one of ordinary skill that switching control of the system may be based on current measurements.

As for claim 13, Archambaud et al teaches an interface (or *RF/IF Interface 76, Fig 6*) for evaluating a control command of the processor (may be read on "*provides*

Art Unit: 2642

RSSI information...”(See Col. 7, lines 5-7), wherein the interface is disposed between the antenna switching system and the processor. (See elements 76, 78-79, Fig. 6).

As for claim 14, Archambaud et al teaches the antenna switching system includes a high frequency switching unit (or *GaAs FET*)(See Col. 6, lines 35-37), the high frequency unit being connectable to each of the plurality of receiving antennas and the processor via the control device (See Col. 7, lines 1-5).

Archambaud et al. only teaches the use of one “high frequency unit”. The Examiner believes that by adding a “plurality of high frequency units”, the Applicant is duplicating the function perform by *switch 78* taught by Archambaud et al.

As for claim 15, the Examiner believes that a GaAS FET switch and, for example, a silicon “PIN diode high frequency switch” may be interchangeably used, as both elements posses the same number of terminals (e.g. two), typical on resistance (e.g. 1.7 ohms), typical off capacitances (0.05 pF), and lower frequency limits (10 MHz).

Response to Arguments

4. Applicant's arguments filed February 22, 2005 have been fully considered but they are not persuasive. Applicant's arguments were addressed by the Examiner in the body of the rejection above.

Art Unit: 2642

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie C. Ubiles whose telephone number is (571)272-7491. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marie C. Ubiles
June 8, 2005.

Harry S. Hong
HARRY S. HONG
PRIMARY EXAMINER